

Plg



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,492	10/18/2001	John T. Fitzgerald	EMS-02601	7498
PATENT GROUP CHOATE, HALL & STEWART EXCHANGE PLACE, 53 STATE STREET BOSTON, MA 02109			EXAMINER AUVE, GLENN ALLEN	
26339	7590	04/28/2004	ART UNIT 2111	PAPER NUMBER 4
DATE MAILED: 04/28/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,492

Applicant(s)

FITZGERALD ET AL.

Examiner

Glenn A. Auve

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,7-29 and 35-42 is/are rejected.
- 7) ☒ Claim(s) 2-6 and 30-34 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9-12, 23-26, and 37-40 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is rejected based on lack of positive antecedent basis of "the particular computer system" on line 2.

Claims 10-12 are rejected because they depend on claim 9.

Claim 23 is rejected based on lack of positive antecedent basis of "the particular computer system" on line 2.

Claims 24-26 are rejected because they depend on claim 23.

Claim 37 is rejected based on lack of positive antecedent basis of "the particular computer system" on line 2.

Claims 38-40 are rejected because they depend on claim 37.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 15-28 recite limitations directed to "a computer program product" comprising various "machine executable code" items. However, the claims do

Application Number: 09/982,492

Art Unit: 2111

not actually recite that the program product is either recorded on some sort of computer readable medium or operating on a computer. As such the claims are directed to functional descriptive material and such material has been found to be non-statutory subject matter. See MPEP § 2106(IV)(B)(1) which states in part:

"Both types of 'descriptive material' are nonstatutory when claimed as descriptive material *per se*. *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
5. Claims 1,7,8,13-15,21,22,27-29,35,36,41, and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Van Dyke, U.S. Pat. No. 6,321,314 B1.

As per claim 1, Van Dyke shows receiving a data operation in connection with a device (at least in the abstract and fig.6 monitoring of access requests); determining a type of the device as one of restricted access or standard access (fig.6 and fig.1 where the memory has restricted and normal access regions); determining if an opcode associated with the operation is included in a first set of opcodes or a second set of opcodes, the first specifying standard operations and the second specifying restricted operations (fig. 6 and col.8); determining a

Art Unit: 2111

target location associated with the data operation (address of the memory location being accessed); and in response to determining one of the first and second sets of opcodes, the type, and the target location, determining if the data operation is valid (fig. 6 and col.8, wherein those factors are used to access the correct location). Van Dyke shows all of the steps recited in claim 1.

As for claim 7, the argument for claim 1 applies. Van Dyke also shows recognizing a device which is of restricted access type by all hosts in the computer system (the host processor 12 recognizes the restricted access type of the memory 38). Van Dyke shows all of the steps recited in claim 7.

As for claim 8, the argument for claim 7 applies. Van Dyke also shows restricting access to a recognized device to a particular host in the computer system by having the particular host perform data operations to the device using opcodes in the second set (figs. 1 and 6 and col.8, wherein host processor 12 accesses the restricted memory 38 using opcodes in the second set). Van Dyke shows all of the steps recited in claim 7.

As for claim 13, the argument for claim 1 applies. Van Dyke also shows installing an application programming interface on a host in the computer system performing the data operation; and using the application programming interface to issue the operation (applications 26 and 28 issue memory access operations implemented by the host 12 to the memory device). Van Dyke shows all of the steps recited in claim 13.

As for claim 14, the argument for claim 13 applies. Van Dyke also shows configuring the application programming interface in accordance with a device configuration associated with the host wherein the device configuration includes the host accessing at least one device as a restricted access (fig. 6 and col.8). Van Dyke shows all of the steps recited in claim 14.

Application Number: 09/982,492

Art Unit: 2111

As for claims 18,21,22,27, and 28, these claims are directed to a computer program product that implements the method steps recited in claims 1,7,8,13, and 14, respectively. As such the same arguments above for those claims apply to this group of claims since the method of Van Dyke is performed on a computer as part of programmed computer operations.

As for claims 29,35,36,41, and 42, these claims are directed to "means for" implementing the method steps recited in claims 1,7,8,13, and 14, respectively. As such the same arguments above for those claims apply to this group of claims since the method of Van Dyke is performed on a computer by some "means for" carrying out the operations.

Conclusion


6. Claims 2-6 and 30-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (703) 305-9638. The examiner can normally be reached on M-Th 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2111

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Glenn A. Auve
Primary Examiner
Art Unit 2111

gaa
April 26, 2004